Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. **(Original)** A method of wireless communication that comprises:

receiving a beacon frame that specifies a rotation sequence and a hopping sequence;

missing a subsequent beacon frame; and

using the rotation sequence and hopping sequence received previously to determine a current frequency hopping sequence for a current superframe following the missed beacon frame.

2. **(Original)** The method of claim 1, further comprising:

using the current frequency hopping sequence to receive a frame transmitted during the current superframe.

3. **(Original)** The method of claim 1, further comprising:

using the current frequency hopping sequence to transmit a frame during the current superframe.

4. **(Original)** The method of claim 1, wherein the beacon frame includes an information element that specifies the rotation sequence and a frequency hopping sequence for a superframe following the beacon frame.

5. **(Original)** The method of claim 4, wherein the rotation sequence is specified in terms of a rotation index and the hopping sequence is specified in terms of a hopping index.

6. **(Original)** The method of claim 5, wherein the hopping index is incremented (with rollover) for each subsequent superframe.

7. **(Original)** The method of claim 1, wherein the hopping sequence is from a pool of hopping sequences that has a minimum cross-correlation.

8. **(Original)** A method of wireless communication that comprises:

coordinating a series of superframes, wherein the coordinating includes

transmitting a beacon for each superframe,

wherein each beacon indicates a frequency hopping sequence to be used for communications during that superframe, and

wherein each beacon specifies a rotation sequence indicative of frequency hopping sequences that will be used for communications in subsequent superframes; and

using the frequency hopping sequence for each superframe to receive any frames other than the beacon during that superframe.

9. **(Original)** The method of claim 8, wherein each beacon frame includes an information element that specifies the rotation sequence and the frequency hopping sequence for the superframe following the beacon frame.

10. **(Original)** The method of claim 9, wherein the rotation sequence is expressed in terms of a rotation index and the hopping sequence is expressed in terms of a hopping index.

11. **(Original)** The method of claim 10, wherein the hopping index is incremented (with rollover) for each subsequent superframe.

12. **(Original)** A piconet member device that comprises:

an antenna;

a processor coupled to the antenna to receive and transmit piconet communications; and

a memory coupled to the processor, wherein the memory stores software that configure the processor to:

detect beacon frames in the received piconet communications, wherein the beacon frames delineate piconet superframes; and

obtain from the beacon frames a rotation sequence for frequency hopping sequences.

13. **(Original)** The device of claim 12, wherein the software further configures the processor to:

determine if a beacon frame has been missed, and

use the rotation sequence to determine a frequency hopping sequence for each superframe following a missed beacon frame.

14. **(Original)** The device of claim 13, wherein the software further configures the processor to:

use the frequency hopping sequences determined from the rotation sequence to receive data frames sent during superframes following missed beacon frames.

15. **(Original)** The device of claim 12 wherein the software further configures the processor to:

obtain from a received beacon a frequency hopping sequence for the superframe following the received beacon.

16. **(Original)** The device of claim 15, wherein the frequency hopping sequence is selected from a hopping sequence pool having a minimum cross-correlation.

17. **(Original)** The device of claim 12, wherein the rotation sequence is selected from a rotation sequence pool having a minimum cross-correlation.

18. **(Original)** A piconet coordinator device that comprises:

an antenna; and

a processor coupled to the antenna to receive and transmit piconet communications, wherein the processor is configured to:

transmit beacon frames that delineate piconet superframes,

wherein each beacon frame includes a field that specifies a rotation sequence for frequency hopping sequences, and further includes a field that indicates a frequency hopping sequence to be used in an associated superframe.

19. **(Original)** The device of claim 18, wherein the field that indicates a frequency hopping sequence contains a hopping index value that is incremented for each of multiple subsequent superframes.

20. **(Original)** The device of claim 18, wherein the field that indicates a frequency hopping sequence contains an identifier that specifies a frequency hopping sequence from a pool of available frequency hopping sequences.

21. **(Original)** The device of claim 20, wherein the pool of frequency hopping sequences has a minimum cross-correlation.